

# SBCS

Shot Bag Clipping System

ENGLISH



Advanced Ergonomics and Safety.



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**TIPPERTIE™**

# SBCS (Shot Bag Clipping System)

## Area of Application



The SBCS is a fully automated, dual clip packaging system designed for large diameter shot bags filled with explosives emulsions for open pit, quarry and construction blasting applications. TIPPER TIE engineers developed the system with the goal of improving operator ergonomics and safety, as well as reducing labor. The operator is removed from most manual functions, performing only the simple task of loading an empty shot bag onto the machine. The bag is then filled, clipped, and discharged automatically. In many instances, the SBCS can reduce labor requirements by half.

This versatile system produces packages from 3 to 8" (76 – 203 mm) diameter, with weights from 10 to 50 pounds (4.5 – 22.6 kg). Both woven and non-woven, multi-layer shot bags can be processed at speeds up to five packages per minute depending on the product supply and package size.

## Technical Specifications

Dimensions (W x L x H):	53 x 66 x 100" (1346 x 1676 x 2540 mm)
Weight:	1,172 lbs (531 kg)
Operating Pressure:	80-120 psi (5,6 - 8,3 bar)
Caliber:	3 – 8" (75 mm - 205 mm)
Clip Type:	700 Series Clips 731 & 751

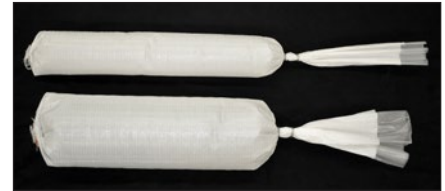
TIPPER TIE, Inc.  
2000 Luffkin Road  
Apex, NC 27539 USA  
Tel. +1 919 362 8811  
Fax +1 919 362 4839  
infoUS@tippertie.com

TIPPER TIE TECHNOPACK GmbH  
Wilhelm-Bergner-Strasse 9a  
21509 Glinde/Germany  
Tel. +49 40 72 77 04 0  
Fax +49 40 72 77 04 100  
infoDE@tippertie.com

## Technical Highlights

The SBCS system features state-of-the-art engineering to ensure operator safety while automating physically demanding tasks. Its light curtain safety interlock prevents the machine from cycling until after the shot bag is loaded onto the filling tooling and no intrusion is detected in the clipper area. A sensor detects the bag is in place and activates the gripper to secure it tightly to the tooling for the remainder of the cycle. To ensure the package has no voids, the bag draw system pulls the bag tight, removing all the air. To keep the bag tail clean and free of product, the lance end closure valve closes the filling tube while the bag is being closed. Finally, the double gate clipper applies two clips simultaneously, about an inch apart, to provide a tight, durable closure. When the clip supply is low, the sensor alerts the operator via a light in the clipping area. The clips can be refilled as the system continues to cycle. To facilitate easier handling of the filled shot bags from the conveyor, the kick plate orients the package during discharge onto the conveyor with the clipped end of the bag in the direction of the packing area. The SBCS system is controlled through an Allen-Bradley PLC and HMI touchscreen interface that allows

for recipe setup and communicates vital diagnostic information.



## Options

- Two available sizes:
  - 3 - 4" (76 – 101.6 mm) bags
  - 5 - 8" (127 – 203 mm) bags
- Additional tooling sets
- Right or left hand machine configurations



Easy loading of empty shot bags.



Hands-free automated filling and clipping for reduced labor requirements.